

WHAT IS CLAIMED IS:

1. A projector, comprising:  
a light source device, luminous flux emitted from the light source device being magnified and projected so as to form a projected image after being modulated;  
an outer case that accommodates the light source device; and  
a cooling passage that cools the outer case and the light source device formed in a vicinity of the light source device in the outer case.
2. The projector according to Claim 1, the cooling passage being formed by cooling air being blown out of a cooling duct arranged inside the outer case, a cooling air inlet hole of the cooling duct being capable of taking cooling air from the exterior of the outer case, and a discharge hole of the cooling duct having an opening formed to directly blow the cooling air on an internal side face of the outer case.
3. The projector according to Claim 2, further including a restrictor formed in an upstream side of the opening of the cooling duct.
4. The projector according to Claim 2, the cooling air inlet hole of the cooling duct being divided into two directions by a first passage and a second passage, the first passage cooling an inside of a light source lamp of the light source device, while the second passage being capable of cooling an outer peripheral portion of the light source lamp and the internal side face of the outer case.
5. The projector according to Claim 2, the cooling duct being provided with a guide section formed in one piece to lead the cooling air to the inside and the outer peripheral portion of the light source lamp of the light source device.
6. The projector according to Claim 1, further including an air inlet hole that receives external cooling air being formed on a side face of the outer case and in the vicinity of the cooling air inlet hole of the cooling duct.
7. The projector according to Claim 1, further including a centrifugal fan which is connected to the cooling duct in the side of the cooling air inlet hole.
8. The projector according to Claim 7, the centrifugal fan being a sirocco fan disposed on an internal side face of the outer case, and further including an exhaust fan arranged on a side face perpendicular to the internal side face of the outer case that exhausts cooling air that has been received from the sirocco fan and the cooling duct and that has cooled the outer case.